## **ABSTRACT**

A method includes a periodic motion data input step S208 of receiving input of periodic motion data indicating changes of the periodic motion with time in an object to be examined who is a target of image data collection, a step S214 of estimating fluctuations in the time resolution of the image data with time based on the periodic motion data, designating an image collection range in the object, and adjusting the collection position of the image data such that the image data is collected in the image collection range at a suitable time of image data collection, the estimated time resolution being set in a predetermined suitable range, and an image data collection position control step S216 of relatively moving at least a part of the image data collection range and the collection position of the image data such that the part of the range and the position are superimposed on each other within a time when the image data of the image data collection range has a time resolution within the desired range based on the image data collection conditions.